

Silicon NPN Power Transistors

2N6270 2N6271

**DESCRIPTION**

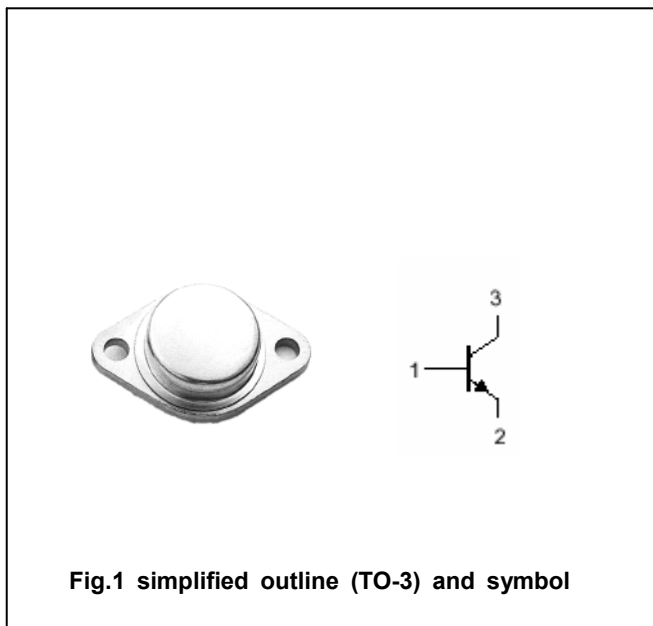
- With TO-3 package
- High current capability
- Wide safe operating area

**APPLICATIONS**

- Designed for audio amplifier and switching circuits applications

**PINNING**

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector



**Absolute maximum ratings(Ta=□)**

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	2N6270	100	V
		2N6271	120	
V <sub>CEO</sub>	Collector-emitter voltage	2N6270	80	V
		2N6271	100	
V <sub>EBO</sub>	Emitter-base voltage	Open collector	7	V
I <sub>C</sub>	Collector current		30	A
P <sub>D</sub>	Total Power Dissipation	T <sub>C</sub> =25□	150	W
T <sub>j</sub>	Junction temperature		150	□
T <sub>stg</sub>	Storage temperature		-65~200	□

**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	VALUE	UNIT
R <sub>th j-c</sub>	Thermal resistance junction to case	0.875	□/W

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## CHARACTERISTICS

T<sub>j</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CEO(SUS)</sub>	Collector-emitter sustaining voltage	2N6270	I <sub>C</sub> =0.1A ; I <sub>B</sub> =0	80			V
		2N6271		100			
V <sub>CEsat</sub>	Collector-emitter saturation voltage		I <sub>C</sub> =7.5A ; I <sub>B</sub> =0.75A			1.0	V
V <sub>BEsat</sub>	Base-emitter saturation voltage		I <sub>C</sub> =7.5A ; I <sub>B</sub> =0.75A			1.3	V
I <sub>CEO</sub>	Collector cut-off current		V <sub>CE</sub> =1/2RatedV <sub>CE</sub> ; I <sub>B</sub> =0			5.0	mA
I <sub>CEV</sub>	Collector cut-off current		V <sub>CE</sub> =RatedV <sub>CE</sub> ; V <sub>BE(off)</sub> =1.5V			1.0	mA
I <sub>EBO</sub>	Emitter cut-off current		V <sub>EB</sub> =7V; I <sub>C</sub> =0			1.0	mA
h <sub>FE</sub>	DC current gain		I <sub>C</sub> =15A ; V <sub>CE</sub> =4V	20		100	
f <sub>T</sub>	Transistion frequency		I <sub>C</sub> =1A ; V <sub>CE</sub> =10V		75		MHz

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PACKAGE OUTLINE



Fig.2 outline dimensions (unindicated tolerance:±0.10mm)